

Attorney Docket No. SHXP:101US
U.S. Patent Application No. 10/605,729
Reply to Office Action of November 10, 2005
Date: February 9, 2006

Remarks/Arguments

Claim Amendments

Claim 25 has been amended to recite: “An article for fastening comprising: a fastener selected from the group including a rivet nut, a rivet nut stud, a threaded insert, and a blind threaded insert, wherein said fastener has an inner surface, an outer surface, and a flange, wherein at least a portion of said outer surface is operatively arranged to expand, and at least a portion of a surface of said flange has an adhesive thereon.”

The added claim limitation is fully supported by the specification. For example, Figures 12, 14, 16, and 17 and paragraphs [0019] through [0022] illustrate/describe a present invention article having an outer surface operatively arranged to expand. No new matter has been added.

The Objection to the Specification Under 35 USC §132(a)

The amendment that was filed September 26, 2005 was objected to for adding new matter in the form of the phrase an “adhesive forming a strip about the flange.” Applicant disagrees with the Examiner, but has amended Claim 2 to recite the limitation in the original Claim 2: “said adhesive layer forms a strip around said outer surface.” This claim language is fully supported by the specification. Applicant respectfully requests that the objection to the specification be removed.

The Objection to the Drawings Under 37 CFR §1.83(a)

The Examiner objected to the amended claim language that read the “adhesive layer forming a strip around said flange.” Applicant disagrees with the Examiner, but as noted above, has amended Claim 2 to recite the limitation in the original Claim 2: “said adhesive layer forms a strip around said outer surface.” Applicant respectfully requests that the objection to the drawings be removed.

Attorney Docket No. SHXP:101US
U.S. Patent Application No. 10/605,729
Reply to Office Action of November 10, 2005
Date: February 9, 2006

The Rejection of Claim 2 Under 35 USC §112

The Examiner rejected Claim 2 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Examiner argued that the original disclosure did not support the limitation “the adhesive forms a strip around said flange” that was added to Claim 2 in the previous amendment. Applicant disagrees with the Examiner, but as noted above, has amended Claim 2 to recite the limitation in the original Claim 2: “said adhesive layer forms a strip around said outer surface.” Amended Claim 2 is fully described in the specification. Applicant respectfully requests that the rejection be removed.

The Rejection of Claims 25, 2-4, 6, 12, 14, 15, 20, 23 and 24 Under 35 U.S.C. §102(b)

The Examiner rejected Claims 25, 2-4, 6, 12, 14, 15, 20, 23 and 24 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,082,405 (Witten). Applicant respectfully traverses the rejection.

Anticipation requires that all of the elements of the claim be taught within the four corners of a single reference.

Applicant has amended Claims 2 and 25. Claim 25 is the only remaining independent claim and all other claims depend from Claim 25.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Witten does not teach an expandable fastener

Claim 25 recites: “An article for fastening comprising:
a fastener selected from the group including a rivet nut, a rivet nut stud, a threaded insert, and a blind threaded insert, wherein said fastener has an inner surface, an outer surface, and a flange, wherein at least a portion of said outer surface is operatively arranged to expand, and at least a portion of a surface of said flange has an adhesive thereon.”

The Examiner has asserted that the insert in Witten is equivalent to the structure in Claim 25. However, Witten fails to teach a fastener with at least a portion of an outer surface arranged to expand. That is, Witten only teaches an insert with a non-expanding outer surface. Alternately stated, the insert in Witten maintains its shape during use. For example, in Figures 1-12, the outer surface is clearly shown as non-expanding. The sectional views in Figure 7 and 12 show that the insert has a relatively thick wall, further reinforcing the teaching that the walls are non-expandable.

Witten's insert has an inner threaded portion that receives threaded members, such as a bolt or the like. In order for the threaded portion and the members to properly engage, the threaded portion must maintain a consistent and uniform shape and diameter. However, if the Witten insert expanded, the threaded portion of the insert would distort and the member would no longer be able to engage the threaded portion. Witten also teaches that the insert is used to attach to a honeycomb panel (see Abstract, Summary of the Invention, col. 3, lines 32-35, claim 1, and Figures 8 and 9). An expandable insert would cause damage to the honeycomb panel. Witten teaches a threaded exterior surface for the insert. Such a threaded structure would have no use if the exterior surface were expandable.

Witten does not inherently disclose the fasteners recited in Claim 25. "Moreover, a prior art reference may anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference." *Continental Can Co. v. Monsanto Co.*, 948 F2.d 1264, 1268 [20 USPQ2d 1746] (Fed. Cir. 1991). In fact, an expandable outer surface is necessarily not present in Witten's potted insert, since such a surface would render Witten's insert inoperable and damage the honeycomb panel with which the insert is used.

Witten teaches a potted insert, which is designed to engage, along its entire length, a solid matrix, for example, the honeycomb panel shown in Figures 8 and 9. Claim 25 recites: "a rivet nut, a rivet nut stud, a threaded insert, and a blind threaded insert," all of which are blind rivet nuts. Blind rivet nuts are not the same as the potted insert taught by Witten. Blind rivet nuts are

Attorney Docket No. SHXP:101US
U.S. Patent Application No. 10/605,729
Reply to Office Action of November 10, 2005
Date: February 9, 2006

generally used to fasten relatively thin sheets of material together. Also, a fundamental aspect of blind rivet nuts is that the body of the rivet nut is expandable to hold the sheets or other material between the flange of the rivet nut and the expanded body, as shown in Figures 16 and 17 of the present application. Witten teaches a completely different physical structure, principle of operation, and application for the potted insert.

Nor does Witten suggest or motivate a fastener with at least a portion of an outer surface arranged to expand.

Witten does not teach each and every element as set forth in Claim 25. Therefore, Claim 25 is novel with respect to Witten. Claims 3, 4, 6, 12, 14, 15, 20, 23, and 24, dependent from Claim 25, enjoy the same distinction from the cited reference. Applicant courteously requests that the rejections be removed.

The Rejection of Claims 13 and 22 Under 35 U.S.C. §103

The Examiner rejected Claims 13 and 22 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,082,405 (Witten) in view of U.S. Patent No. 4,632,944 (Thompson). Applicant respectfully traverses the rejection.

The Examiner asserts that Applicant admits in paragraph [0040] of the specification that any adhesive known in the art can be used, including microencapsulated adhesives. Applicant disagrees with the Examiner. However, this point is moot in light of the argument below.

Applicant has shown that Witten fails to teach, suggest, or motivate all the elements of Claim 25. In fact, Applicant has shown that Witten teaches against an expandable outer surface. “*A prima facie* case of obviousness can be rebutted if one of the cited references teaches away from the claimed invention. See *In re Geisler*, 43 U.S.P.Q. 2d 1362, 1366 (Fed. Cir. 1997).”

Thompson does not cure the defects of Witten, in particular, with respect to an expandable outer surface. Therefore, Claim 25 is patentable over Witten and Thompson. Claims 13 and 22, dependent from Claim 25, enjoy the same distinction from Witten and Thompson. Applicant courteously requests that the rejection be removed.

Attorney Docket No. SHXP:101US
U.S. Patent Application No. 10/605,729
Reply to Office Action of November 10, 2005
Date: February 9, 2006

The Rejection of Claims 1, 12, and 13 Under 35 U.S.C. §103

The Examiner rejected Claim 13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,082,405 (Witten) in view of Loctite Product 204 Product Description Sheet (Loctite) as cited by Applicant. Applicant respectfully traverses the rejection.

Applicant has shown that Witten fails to teach, suggest, or motivate all the elements of Claim 25. In fact, Applicant has shown that Witten teaches against an expandable outer surface. “*A prima facie* case of obviousness can be rebutted if one of the cited references teaches away from the claimed invention. See *In re Geisler*, 43 U.S.P.Q. 2d 1362, 1366 (Fed. Cir. 1997).”

Loctite does not cure the defects of Witten, in particular, with respect to an expandable outer surface. Therefore, Claim 25 is patentable over Witten and Loctite. Claim 1 has been cancelled. Claims 12 and 13, dependent from Claim 25, enjoy the same distinction from Witten and Loctite. Applicant courteously requests that the rejection be removed.

The Rejection of Claims 18 and 19 Under 35 U.S.C. §103

The Examiner rejected Claims 18 and 19 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,082,405 (Witten) in view of U.S. Patent No. 5,733,083 (Heminger). Applicant respectfully traverses the rejection.

Applicant has shown that Witten fails to teach, suggest, or motivate all the elements of Claim 25. In fact, Applicant has shown that Witten teaches against an expandable outer surface. “*A prima facie* case of obviousness can be rebutted if one of the cited references teaches away from the claimed invention. See *In re Geisler*, 43 U.S.P.Q. 2d 1362, 1366 (Fed. Cir. 1997).”

Heminger does not cure the defects of Witten, in particular, with respect to an expandable outer surface. Therefore, Claim 25 is patentable over Witten and Heminger. Claims 18 and 19, dependent from Claim 25, enjoy the same distinction from Witten and Heminger. Applicant courteously requests that the rejection be removed.

Attorney Docket No. SHXP:101US
U.S. Patent Application No. 10/605,729
Reply to Office Action of November 10, 2005
Date: February 9, 2006

Conclusion

Applicant respectfully submits that all pending claims are now in condition for allowance, which action is courteously requested.

Respectfully submitted,



C. Paul Maliszewski, P.E.
Registration No. 51,990
CUSTOMER NO. 24041
Simpson & Simpson, PLLC
5555 Main Street
Williamsville, NY 14221-5406
Telephone No. 716-626-1564

CPM/TGM

Dated: February 9, 2006